

Appl. No. 09/890,775
Amdt. dated February 5, 2004
Reply to Office Action of November 5, 2003

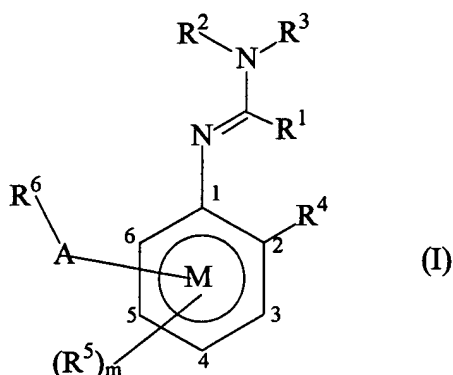
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-73 (Canceled)

74. (Currently Amended) A compound of formula I and salts thereof



wherein

R¹ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl and optionally substituted heterocyclyl;

each of R² and R³, which may be the same or different, is any group defined for R¹, or together with the nitrogen to which they are attached form a ring, which may be substituted;

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R⁴ is selected from the group consisting of alkyl, alkenyl, alkynyl, carbocyclyl and heterocyclyl, each of which may be substituted;

m is 1;

R⁵ is any group defined for R⁴ attached to the 5-position of the benzene ring M;

R⁶ is optionally substituted carbo- or heterocyclyl; and

A is selected from the group consisting of a direct bond, -O-, -S-, -NR⁹-, -CHR⁷-, and
~~-O-CHR⁷-, hydroxy, halogen, cyano, acyl, alkoxy, haloalkoxy and alkylthio;~~

where R⁹ is selected from the group consisting of alkyl, alkenyl and alkynyl, each of which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and optionally substituted phenyl;

where R⁷ is selected from the group consisting of alkyl, alkenyl and alkynyl, which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and phenyl optionally substituted by a member of the group consisting of alkyl, haloalkyl, alkoxy, haloalkoxy and alkylthio; hydroxy; halogen; cyano; acyl; alkoxy; haloalkoxy; and alkylthio;

where -A-R⁶ is in the 4-position of the benzene ring M and the moiety depicted on the right side of linkage A is attached to R⁶,

or -A-R⁶ and R⁵ together with benzene ring M form an optionally substituted fused ring system.

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75. (Currently Amended) The compound of claim 74, wherein

R¹ is alkyl or hydrogen;

each of R² and R³, which may be the same or different, is selected from the group consisting of hydrogen, alkyl, alkenyl and carbocyclyl;

R⁴ is alkyl or alkenyl;

m is 1;

R⁵ is any group defined for R⁴ attached to the 5-position of the benzene ring M;

R⁶ is optionally substituted carbo- or heterocyclyl; and

A is selected from the group consisting of a direct bond, -O-, -S-, and NR⁹-,

where R⁹ is selected from the group consisting of -CHR⁷-, -O-CHR⁷-, optionally substituted alkyl, optionally substituted alkenyl and optionally substituted alkynyl, where said substitution group is selected from the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and optionally substituted phenyl;

where R⁷ is selected from the group consisting of hydroxy, halogen, cyano, acyl, alkoxy, haloalkoxy, alkylthio, optionally substituted alkyl, optionally substituted alkenyl, and optionally substituted alkynyl, where said substitution group is selected from the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and phenyl optionally substituted by a member of the group selected from alkyl, haloalkyl, alkoxy, haloalkoxy and alkylthio; and

where -A-R⁶ is in the 4-position of the benzene ring M and the moiety depicted on the right side of linkage A is attached to R⁶;

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or -A-R⁶ and R⁵ together with benzene ring M form an optionally substituted fused ring system.

76. (Previously Added) The compound of claim 75 wherein

R¹ is hydrogen;

R² and R³, which may be the same or different, are alkyl or alkenyl;

R⁴ is alkyl;

m is 1;

R⁵ is any group defined for R⁴ attached to the 5-position of the benzene ring M;

R⁶ is optionally substituted carbo- or heterocyclyl; and

A is -O-;

where -A-R⁶ is in the 4-position of the benzene ring M and the moiety depicted on the right side of linkage A is attached to R⁶.

77. (Previously Added) The compound of claim 74 which is selected from the group consisting of:

N'-[4-(3-tert-butylphenoxy)-2,5-dimethylphenyl]-N,N-dimethylimidoforamide,

N'-[4-(3-tert-butylphenoxy)-2,5-dimethylphenyl]-N-ethyl-N-methylimidoforamide,

N-allyl-N'-[4-(3-tert-butylphenoxy)-2,5-dimethylphenyl]-N-methylimidoforamide,

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N'-(4-{[4-(2-chlorophenyl)-1,3-thiazol-2-yl]oxy}-2,5-dimethylphenyl)-N,N-dimethylimidoformamide,

N'-[2,5-dimethyl-4-(3-phenoxyphenoxy)phenyl]-N-ethyl-N-methylimidoformamide,

N'-{4-[4-chloro-3-(trifluoromethyl)phenoxy]-2,5-dimethylphenyl}-N,N-dimethylimidoformamide,

N'-{4-[4-chloro-3-(trifluoromethyl)phenoxy]-2,5-dimethylphenyl}-N-ethyl-N-methylimidoformamide,

N'-{4-[3-(1-methoxy-1-methylethyl)phenoxy]-2,5-dimethylphenyl}-N,N-dimethylimidoformamide, and

N-ethyl-N'-{4-[4-fluoro-3-(trifluoromethyl)phenoxy]-2,5-dimethylphenyl}-N-methylimidoformamide.

78. (Previously Added) A fungicidal composition comprising at least one compound as claimed in claim 74 in admixture with an agriculturally acceptable diluent or carrier.

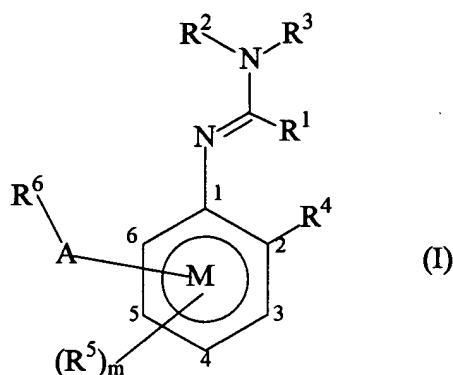
79. (Canceled)

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80. (New) A method of combating fungi at a locus infested or liable to be infested therewith, which comprises applying to the locus a compound of formula I or a salt thereof



wherein

R¹ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted carbocyclyl and optionally substituted heterocyclyl;

each of R² and R³, which may be the same or different, is any group defined for R¹, or together with the nitrogen to which they are attached form a ring, which may be substituted;

R⁴ is selected from the group consisting of alkyl, alkenyl, alkynyl, carbocyclyl and heterocyclyl, each of which may be substituted;

m is 1;

R⁵ is any group defined for R⁴ attached to the 5-position of the benzene ring M;

R⁶ is optionally substituted carbo- or heterocyclyl; and

A is selected from the group consisting of a direct bond, -O-, -S-, -NR²-, -CHR⁷-, and

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-O-CHR⁷-;

where R⁹ is selected from the group consisting of alkyl, alkenyl and alkynyl, each of which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and optionally substituted phenyl;

where R⁷ is selected from the group consisting of alkyl, alkenyl and alkynyl, which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and phenyl optionally substituted by a member of the group consisting of alkyl, haloalkyl, alkoxy, haloalkoxy and alkylthio; hydroxy; halogen; cyano; acyl; alkoxy; haloalkoxy; and alkylthio;

where -A-R⁶ is in the 4-position of the benzene ring M and the moiety depicted on the right side of linkage A is attached to R⁶,

or -A-R⁶ and R⁵ together with benzene ring M form an optionally substituted fused ring system.

81. (New) The method of claim 80, wherein R¹ is selected from the group consisting of alkyl, alkenyl and alkynyl, each of which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and optionally substituted phenyl.

82. (New) The method of claim 80, wherein R¹ is hydrogen.

83. (New) The method of claim 80, wherein R¹ is C₁-C₁₀ alkyl.

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84. (New) The method of claim 80, wherein each of R^2 and R^3 , which may be the same or different, is selected from the group consisting of alkyl, alkenyl and alkynyl, each of which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen, and optionally substituted phenyl.

85. (New) The method of claim 80, wherein each of R^2 and R^3 , which may be the same or different, is C_1 - C_{10} alkyl or hydrogen.

86. (New) The method of claim 80, wherein R^4 is selected from the group consisting of alkyl, alkenyl and alkynyl, each of which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and optionally substituted phenyl.

87. (New) The method of claim 80, wherein R^4 is C_1 - C_{10} alkyl or halogen.

88. (New) The method of claim 80, wherein R^5 is selected from the group consisting of alkyl, alkenyl and alkynyl, each of which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen and optionally substituted phenyl.

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89. (New) The method of claim 80, wherein, when present, R⁷ is selected from the group consisting of alkyl, alkenyl, and alkynyl, each of which may be substituted by a member of the group consisting of alkoxy, haloalkoxy, alkylthio, halogen, and phenyl optionally substituted by a member selected from the group consisting of alkyl, haloalkyl, alkoxy, haloalkoxy, and alkylthio.

90. (New) The method of claim 80, wherein, when present, R⁷ is selected from the group consisting of hydroxy, halogen, cyano, acyl, alkoxy, haloalkoxy, alkylthio and hydrogen.

91. (New) The method of claim 80, wherein R⁶ is optionally substituted phenyl or optionally substituted aromatic heterocyclyl.

92. (New) The method of claim 80, wherein R⁶ is substituted by one or more substituents, which may be the same or different, and selected from the group consisting of alkyl, alkenyl, alkynyl, carbo- and heterocyclyl, each of which may be substituted.

93. (New) The method of claim 80, wherein R⁶ is substituted by one or more substituents, which may be the same or different, and selected from the group consisting of hydroxy, mercapto, azido, nitro, halogen, cyano, acyl, optionally substituted amino, cyanato, thiocyanato, -SF₅, -OR^a, -SR^a and -Si(R^a)₃, where R^a is selected from the group consisting of alkyl, alkenyl, alkynyl, carbocyclyl and heterocyclyl, each of which may be substituted.

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94. (New) The method of claim 80, wherein R^6 is substituted by one or more substituents, which may be the same or different, and selected from the group consisting of hydroxy, halogen, cyano, acyl, amino, alkylamino, dialkylamino, alkyl, haloalkyl, R^aO -alkyl, acyloxyalkyl, cyano-oxyalkyl, alkoxy, haloalkoxy, alkylthio, carbocyclyl, and benzyl, where R^a is selected from the group consisting of alkyl, alkenyl, alkynyl, carbocyclyl and heterocyclyl, each of which may be substituted.

95. (New) The method of claim 94, wherein said R^6 is substituted by carbocyclyl, which is optionally substituted by a member selected from the group consisting of alkyl, haloalkyl, alkoxy, haloalkoxy and alkylthio.

96. (New) The method of claim 94, wherein said R^6 is substituted by benzyl, which is optionally substituted by a member selected from the group consisting of alkyl, haloalkyl, alkoxy, haloalkoxy and alkylthio.